

Title (en)

AIRTIGHT WOVEN SHEET FOR AIR BAGS AND METHOD OF MANUFACTURING THE SAME

Title (de)

LUFTUNDURCHLÄSSIGE GEWELLTE STOFFBAHN FÜR LUFTKISSEN UND VERFAHREN ZU IHRER HERSTELLUNG

Title (fr)

FEUILLE TISSEE ETANCHE A L'AIR POUR AIR-BAGS ET PROCEDE DE FABRICATION D'UNE TELLE FEUILLE

Publication

EP 0558762 B1 19960821 (EN)

Application

EP 92920309 A 19920925

Priority

- JP 9201217 W 19920925
- JP 17081292 A 19920629
- JP 27501191 A 19910927

Abstract (en)

[origin: WO9305985A1] An airtight woven sheet for air bags, not having the possibility of causing gas-permeable holes to develop in an air bag made of this sheet, when inflated, not having the possibility of causing a gas to flow out from such an air bag to burn an occupant of the vehicle, capable of being reinforced very effectively when sealed with a bonding agent, having a high bursting strength, and having an excellent hand. This woven sheet includes a fabric consisting of weft and warp threads of multifilament yarn of polyester of 200-550 denier having a twist multiplier of not more than 3000, and having a smoothed surface formed by calendering and another non-smoothed surface. This fabric shall satisfy all of the following conditions: the gas-permeability function (ml/cm²/sec) is in the range of 7.874p-78.74p (p is 0-0.03 kg/cm²G). The radius of curvature (R1) of a smoothed surface-side half portion of a cross-sectional contour line of a weft thread and/or a warp thread in the smoothed surface of the fabric is larger than a radius of curvature (R2) of the opposite side half portion thereof, and also larger than a radius of curvature (R3) of a non-smoothed surface-side half portion of a cross-sectional contour line of a weft thread and/or a warp thread in the non-smoothed surface of the fabric. R3 is in the range of 0.5-3.5. A difference in the average deviation of the friction coefficient between the non-smoothed surface and the smoothed surface is not less than 0.0005. A difference in the average deviation of the surface roughness between the non-smoothed surface and the smoothed surface is not less than 0.5 μm , and a fiber packing rate 70-85 %.

IPC 1-7

B60R 21/16

IPC 8 full level

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CPC (source: EP US)

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Cited by

GB2283463A; FR2845771A1; EP1365059A4; CN104870703A; US6044629A; EP0867266A3; GB2344358A; GB2344358B; GB2284181A; US5566972A; GB2284181B; US7309666B2; US6458725B1; WO9817505A1

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